Process for preparing carotenoids

Abstract

5

The invention relates to a process for preparing carotenoids, which comprises reacting a dialkoxy dialdehyde of the general formula I

10

$$O \longrightarrow OR^1$$
 OR^1
 OR^1

with $R^1 = C_1 - C_6 - alkyl$, in a double Wittig condensation with a 15 phosphonium salt of the formula II or in a double Wittig-Horner condensation with a phosphonate of the formula III,

20

$$R^2$$
 $P(R^3)_3$
 X
 R^4O
 $PO(OR^5)_3$
 III

in which the substituents have independently of one another the following meaning:

25

35

 \mathbb{R}^3 aryl;

to R6 R^4

40 C1-C6-alkyl and

> an anion equivalent of an inorganic or organic acid. X-

45